



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,825	09/07/2004	Jean-Sebastien Durand	TIMK 9060W1	8913
1688	7590	07/07/2006	EXAMINER	
POLSTER, LIEDER, WOODRUFF & LUCCHESI 12412 POWERSCOURT DRIVE SUITE 200 ST. LOUIS, MO 63131-3615			HANNON, THOMAS R	
		ART UNIT	PAPER NUMBER	
			3682	

DATE MAILED: 07/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/506,825	DURAND, JEAN-SEBASTIEN	
	Examiner Thomas R. Hannon	Art Unit 3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 29 June 2006.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 3 and 8-23 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 3 and 8-23 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 29 June 2006 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 8, and 11-23 rejected under 35 U.S.C. 103(a) as being unpatentable over Katzensteiner (DE 4141793) in view of Yasui et al US 4,523,862.

Katzensteiner discloses a steering axle of a vehicle as claimed, including a pivot pin with tapered rolling elements retained in a cage (Figure 5). The pivot pin further includes a radially extending tapered inner race (integrally formed as shown in Figure 7). The inner race having a narrow diameter end and a large diameter end, with a rib at the large diameter end of the inner race, a surface adjacent the rib extends axially with a seal (18, upper right portion of Figure 5) positioned on the surface. With respect to the claim language of "said pivot pin body being adapted to receive a sensor", this limitation defines no structure to the pin, and the pin of Katzensteiner is inherently adaptable to receive a sensor. Katzensteiner does not show the cage having projections engaging a groove. Yasui et al discloses a tapered roller bearing in which a polymer cage includes projections at the large diameter end for engaging in a groove of the inner race member (Figure 9). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the bearing/cage assembly of Katzensteiner such that the cage assembly includes radial projections engaging in a groove on the inner member, because this is taught and suggested by Yasui et al. as providing a bearing assembly of reduced weight by eliminating the small diameter ring, as well as retaining the rollers on the inner member when the outer race is removed.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katzensteiner in view of Yasui et al. as applied to claim 20 above, and further in view of Wilks et al. Wilks discloses a steering pivot in which the pivot pin 6 includes an extension (10) and a groove (19). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the pivot pin of Katzensteiner such that it includes additional structure including that of an extension and groove, for the desired purpose of generating a sensed signal.

Applicant's arguments filed June 29, 2006 have been fully considered but they are not persuasive. With respect to the rejections under 35 USC 103, Applicant states "Claims 20 and 11 both provide that the pivot pin comprises a pivot pin body which is adapted to receive a sensor." As noted in the rejection above, this limitation provides no additional structure to the claim, only the ability to receive a sensor. Such an ability to receive a sensor is inherent in the structure of the prior art, such as by being adhered to any surface in the prior art. Applicant further states the prior art references "do not teach, disclose or suggest that the pivot pin body be adapted to receive a sensor or that a seal is positioned axially behind the groove." As noted in the rejection, Katzensteiner shows the groove seal. The combination with Yasui inherently results in the seal axially behind the groove receiving the retainer projections, as such a groove is adjacent the large diameter thrust ring. Applicant further states the prior art references do not "teach, disclose or suggest that the cage projection which are received in the groove be resilient." However, the projections of Yasui are inherently resilient by virtue of being formed of synthetic resin, and their designed shape being such as to enable the projections to be deformed during engagement into the groove (see e.g. col. 4, lines 46-49 and col. 6, lines 15-21).

With respect to Wilks, it is noted that Applicant does not argue the combination rejection of the dependent claims, but asserts patentability based on the independent claim combination.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas R. Hannon whose telephone number is (571) 272-7104. The examiner can normally be reached on Monday-Thursday (8:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thomas R. Hannon
Primary Examiner
Art Unit 3682

trh